AN APPRAISAL OF HIGH SCHOOL VOCATIONAL PROGRAMS AS PERCEIVED BY SELECTED 1967 HIGH SCHOOL GRADUATES IN THE AREA V AND XI VOCATIONAL DISTRICTS OF IOWA

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by

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CHAPTER I

INTRODUCTION

Vocational and technical education have recently assumed a new importance in this country. As America approaches the final quarter of the twentieth century, educational, industrial, and governmental leaders are re-examining vocational-technical education and its role in society. This has been primarily due to the rapid expansion of technological knowledge and the implementation of this knowledge, the dramatic rise in youth unemployment, the shortage of badly needed personnel in many technical, semiprofessional, and skilled occupations and the need for new educational opportunities both at the secondary and post-secondary levels. To emphasize this, statistics of the Census Bureau have shown that by 1975 nearly one-half of the labor force will be comprised of those in the 14 to 25 year age group.[1] Because of these factors there is, and will be, an urgent demand for vocational training and retraining to provide the kinds of skills these people will need to do their jobs.

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[1] William W. Chase, "Facility Design Consideration," The American School Board Journal, CLIII (October, 1966), 26.

The need for more vocational education has brought an increasing amount of governmental money to meet this need. Along with the allocation of these funds came a need to continually evaluate existing vocational programs in order to determine if they were truly meeting the needs of this country's technological society.

It was with this in mind that the following study was made.

I. THE PROBLEM

Statement of the problem. The purpose of this study was to determine how former high school vocational students from the Area V and XI Vocational Districts of Iowa appraised their high school vocational programs. All of the students surveyed continued their education at the post-secondary level. It was hoped that the information gathered would determine if the secondary school vocational and guidance programs were currently meeting the needs of these youths as they perceived their needs. The information sought by the study was fivefold:

1. To determine to what extent the student valued his high school vocational program.
2. To determine if the high school offered the vocational program the student enrolled in at the post-secondary level.

3. To determine why students continued or discontinued training in the vocational area they studied in high school.
4. To determine who influenced the student's decision to go into the vocational area which he chose.
5. To determine some of the factors students liked or disliked about their high school vocational programs.

Importance of the study. It was hoped to discover information with the study that would indicate what vocational and guidance services would be most meaningful to the future vocational students of Central Iowa. Historical research with the 1967 graduates of Area V and XI high schools might provide a basis for changes which could be integrated into future programs of vocational education and guidance and counseling in the high schools of Central Iowa.

II. DEFINITION OF TERMS

Agricultural education. "Agricultural education is a systematic program of instruction for public school enrollees organized for the purpose of improving agricultural methods and rural living."[1]

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[1] Gilbert G. Weaver (Ch.), Definitions of Terms in Vocational, Technical and Practical Arts Education (Washington: American Vocational Association, Inc., 1964), p. 4.

For the purpose of this study, the term "Agricultural Program" and "Agricultural Education" will be used interchangeably.

Distributive education. Distributive education may be defined as a program of education offering training in the selling, marketing, and merchandising of goods and services for the purpose of improving distribution and upgrading distributive workers.[1]

Health education. Health education refers to an educational program designed for persons who are preparing to enter one of the health occupations.[2]

Enrollment. For the purposes of this survey, a student was enrolled in an approved vocational program if he attended as an enrollee at least one regular class meeting of a course offered in an approved preparatory Vocational-Technical Education program.[3]

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[1]Lyle Natvig, "High School Distributive Education in Iowa," Midland Schools, LXXXII (March-April, 1968), 21.

[2]Administration of Vocational Education-Rules and Regulations, United States Department of Health, Education, and Welfare, Bulletin 1 (Washington: Government Printing Office, 1966), p. 49.

[3]"1968 Vocational Education Student Follow-up" (Des Moines: State of Iowa, Department of Public Instruction, 868P-742G, 1968.) (Mimeographed.)

Approved Vocational-Technical Education program. That vocation or technical education course or combination of courses that: (a) has been approved by the State Board of Public Instruction; (b) has met the program requirements and provisions for reimbursement as established by the State Plan for Vocational Education; and (c) are designed to prepare an individual for employment in a specific job or career area.[1]

Termination of enrollment. There were three methods for a student to terminate a Vocational-Technical Education program: (a) termination due to completion of the approved program, (b) termination due to withdrawal from the approved program, and (c) termination due to withdrawal from the secondary school.[2] For the purposes of this study the writer was solely concerned with those students who completed an approved program.

Home economics education. Home economics education as defined by the American Vocational Association is:

> . . . a program of instruction which is planned for the purpose of assisting youth and adults to understand and solve problems in home and family living and/or to prepare for employment and upgrading in occupations involving

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[1] Ibid. [2] Ibid.

knowledge and skills in home economics subjects.[1]

Office education. Office education is a program leading to employability and advancement in office occupations.

Technical education. Technical education is a program leading to employability in an occupation in which success is dependent largely upon technical information and understanding of the laws of science and principles of technology as applied to modern design and production.[2] The reader should be aware that "vocational" and "technical" are not interchangeable terms, "vocational" refers to a more general concept than does "technical."

Trade and industrial education. Trade and industrial education is a program which is intended to develop basic manipulative skills, safety judgement, and related occupational information for the purpose of fitting persons for initial employment in industrial occupations.[3]

Vocational education. Vocational education, as used in this report, is a general term used to refer to any or all of the types of educational programs referred to previous in this report.

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[1] G. G. Weaver, op. cit., p. 11.

[2] Ibid., p. 20. [3] Ibid.

Vocational guidance. Vocational guidance, as defined by the American Vocational Association means, "the process of assisting individuals to understand their capabilities and interests, to choose a suitable vocation, and to prepare for, enter and make successful progress in it."[1]

III. PROCEDURES USED

Population of the study. From a total of 649 1967 high school graduates who had completed an approved vocational program in an Area V or XI high school and then continued to post-secondary education, 300 were selected to participate in the study. Graduates of the high schools in the cities of Des Moines, Ames, Webster City, Fort Dodge, Boone and Knoxville were omitted from the study because of the lack of accessibility of addresses of students in these cities. The study would tend, then, to represent the views of the rural and small town high school youths in the Central Iowa area.

The questionnaire. Appropriate literature in text-books, professional journals, monographs, and educational periodicals was consulted for the development of criteria

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[1]Ibid., p. 10.

to evaluate a vocational program. With these criteria in mind a questionnaire was developed by the writer for the purpose of surveying the former vocational student. The questionnaire was then submitted to Dr. Stuart C. Tiedeman, Professor of Education at Drake University, for his expert evaluation and later, subsequent approval. The questionnaire, with a letter explaining its purpose and a return envelop, were mailed to the 1967 secondary school graduates of the Area V and XI districts who had completed a vocational program.

Names and home towns of the graduates were learned from the Iowa Department of Public Instruction's list of participants in the Vocational Student Follow-up conducted in the fall of 1967. If replies were not received from the first questionnaire, a second mailing was made. No further efforts were made to trace graduates who did not respond to the second mailing. A sample of the questionnaire used is shown in Appendix A and the accompanying letter of explanation is shown in Appendix B.

Responses were tabulated in tables classifying students as to high school vocational program, post-high school vocational program, reasons for changing subject areas, persons affecting their vocational decisions, reasons for their vocational decisions, wisdom of their vocational

decisions, and their perceived judgement of the value of their high school vocational program. Significant comments made by respondents were also delineated.

IV. PREVIEW OF THE ORGANIZATION OF THE REPORT

Chapter II is a review of literature discussing the historical development of vocational education and the vocational guidance movement, the Federal Government's involvement in vocational education, the current status of vocational education, and the relevance of high school vocational education to rural Iowa.

Chapter III presents the data of the study and the results of the questionnaire.

Chapter IV presents the summary, conclusions and recommendations resulting from the evaluation.

CHAPTER II

REVIEW OF THE LITERATURE

I. HISTORY OF VOCATIONAL EDUCATION

Early European development. From the historical point of view, vocational education is probably as old as any other kind of education. Primitive man did and still does dissipate energy in fruitless ceremonial efforts to appease the unseen spirits, but he also taught his children to perform those functions necessary for the perpetuation and preservation of the group. It is known that both the Greeks and Romans transmitted their vocational skills through guild instruction. The role of guild instruction to train craftsmen during the later middle ages is well understood. Less well known is the fact that many cities on the coasts of Italy and Northern Europe maintained schools during the middle ages for instruction in various vocational skills, notably bookkeeping and navigation.[1]

This state of vocational affairs was well suited to a society whose institutions were based on "permanency".

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[1]Lloyd P. Williams, "The Struggle for Balance-Vocational Education in the Western World," Phi Delta Kappan, XLVI (April, 1965), 356.

However, beginning in the sixteenth and continuing to the present, a countertrend developed, a trend best described by the word "change". The idea of a single religious orthodoxy was the first of the major Western assumptions to fall. Art, music, and literature followed in breaking with traditional forms of expression. The divine right of kings lost its grip on the Western mind and new political arrangements evolved. The industrial revolution brought new meanings to the words "industry," "trade," and "commerce." Change, and not permanency, became the mark of any institution that was to survive.[1]

Each of these revolutions wrought great changes between man and his work. The spread of machines and the discovery of new sources of power meant that tasks formerly requiring physical strength soon required manipulative skill, and these in turn began to require knowledge of the why as well as of the how. For increasing numbers of men the pursuit of a vocation involved more than observation, unitation, and initiative; it meant that they would have to gain some particular vocational training and, eventually, some formal vocational education.[2]

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[1]Charles A. Prosser and Charles R. Allen, Vocational Education in a Democracy (New York: Appleton-Century, 1925), p. 24.

[2]Ibid., p. 25.

Venn stated that the nineteenth century saw a rapid growth in vocational education in Europe. Programs were begun early in the century in Prussia, in an effort to overcome the commercial lead of the British. These early efforts recognized the value of the social and economic efficiency in vocational training. At that time farsighted men realized that the country that organizes its human talents into the greatest reservoir of skills will assure an industrial and commercial advantage. Such a reservoir has been of extreme importance to countries with limited natural resources, and the Germans were quick to sense this key to British and Dutch success. Venn points out that by the end of the nineteenth century the German "Technikum" and continuation school were models for vocational educators around the world.[1]

Prosser and Allen indicated that during the mid-nineteenth century many other European nations had developed systems of vocational education. Great Britain, Austria, Italy, France and Russia moved into this area, often adopting the German models to their own needs. This education took the form of anything from craft instruction in a loft to relatively large experimental farms, industrial training

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[1]Grant Venn, Man, Education, and Work (Washington: American Council on Education, 1963), p. 40.

and university sponsored work in the sciences. The number of students was not large, but grew steadily in proportion to the total number of students in all schools. The point of most importance is that those forms of vocational education became recognized as a legitimate form of education and one worthy of public support.[1]

Development in America. In the beginning and mid-nineteenth century no such gains were recorded for vocational education in the United States. It was not until 1862 and the passage of the Morrill Act that America's vocational education program began to grow.

Early American education was dominated by British thought and practice. The nine colonial colleges, the Latin grammar schools, and the dame schools all reflected English models whose curricula centered on the Greek and Latin classics. There were two notable people who spoke out against this aristocracy oriented education; they were Benjamin Franklin and Thomas Jefferson.[2] Franklin had little taste for the classics and favored a more utilitarian approach

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[1]Prosser and Allen, op. cit., pp. 26-27.

[2]Merle Curti, Social Ideas of American Educators: Report of the American Historical Association Commission on the Social Studies, Part 10 (New York: The Association, 1935), pp. 34-47.

to education. Jefferson proposed a program to establish land-grant support of a national university in 1806 but this program was rejected.

Several local attempts to furnish vocational education have been recorded. In 1823 the first school devoted entirely to vocational instruction, the Gardiner Lyceum in Maine, was opened. Although it lasted for only ten years, scores of similar institutions were begun in succeeding years. Most of these, however, lacked adequate financial basis and faced the distrust of the farmer and, therefore, did not last long.

A few colleges became aware of some need for vocational training. In 1837 the charter for the University of Michigan provided specifically for instruction in practical farming and agriculture. It should be pointed out that this part of the university's program was neglected for many years. The same was true of Peoples College, founded in 1858 in New York. During the 1850's a few colleges created professorships in agricultural or scientific fields, but no substantial programs ensued. A more hopeful development was the founding of separate state supported agricultural schools in Michigan (1855), Pennsylvania (1855), and Maryland (1859), and plans for similar schools in Iowa and Massachusetts.[1]

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[1]Edward D. Eddy, Jr., Colleges for Our Land and Time (New York: Harper & Row, 1956), pp. 6-22.

By 1860 no more than twenty institutions had science curricula, and the census for that year showed that three per cent of the three hundred and ninety-seven American colleges had formal departments of science and agriculture.[1]

Venn cited two primary reasons why vocational education developed at a slow pace in America.[2] The first is related to an application of the law of supply and demand. As was noted earlier, Europe found that because of its limited resources it had to pay greater attention to human skill. America, on the other hand, was a land of great natural resources and thus, a rich soil and ideal climate seemed to ensure good crops without the need for scientific knowledge. The country's commercial life was centered on its abundant supply of raw natural resources and was viewed as a supplier rather than a processer. At the same time, many of the needed skills in the trades and crafts were brought to America by increasing numbers of immigrants.

The pattern of education itself was a stumbling block to vocational education during the nineteenth century. Not only was such a program attacked from within by the advocates

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[1]Ibid., p. 22.

[2]Venn, op. cit., pp. 43-44.

of a classical education but also it was attacked from outside of education by farmers and laborers who felt it would be a threat to their status at that time.[1]

In 1862 the Morrill Act was signed into law. This act provided grants of land to endow, support and maintain state colleges devoted to the agricultural and mechanical arts. As viewed by Venn this act contained five important implications for vocational and technical education:

1. A liberal and practical education was prescribed. The two were not to be placed in separate camps. The classical studies were integrated into curricula that were plainly vocational, and both were to be accommodated without any sense of inferiority.
2. As the financial and philosophical basis of the state university systems, they opened the doors of higher education to a far wider public, removing forever the idea of a single education for a select few.
3. The act gave important status to the mechanical arts and agriculture, and, with the useful-practical controversy as part of its background, greatly changed the college-level teaching of these courses and of other sciences. Science was to be taught, not just for its own sake, but as an instrument for molding the societal environment.
4. The new form of education broke through the suspicions and fears of education of farmers and businessmen. The resistance to agricultural and mechanical education in the colleges gradually was overcome by the extension programs, experimental farms, and the success graduates over the first two decades of the operation of the new colleges. This acceptance of vocationalism in the colleges was to have much significance in the later movement to extend vocational education into the public schools.

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[1] Ibid.

5. The role of the agricultural colleges in improving agriculture in this country was so dramatic and so widely recognized that this new form of education came to be accepted as vital to the national welfare, as a spur to economic growth. The social efficiency of vocational education was proved to a "show me" people.[1]

The emerging high school. Beginning in the 1880's the high school began to emerge as an important segment of the total educational system. Prior to this time the high school, which ranged from one to four years duration, was solely an intermediate step by which to reach college. In 1870 eight out of ten high school graduates entered college and six of them received degrees. By 1900 only twenty-five per cent of the high school graduates continued on to earn degrees.[2] This same trend continued on through 1940 which indicated that high school became the terminal point in the education of most American youth.

The colleges had blazed the vocational trail, but as they advanced the level of their work into the highly skilled and professional areas, such as farming into agricultural science and mechanical arts into engineering, they left a vacuum in the field of middle-level vocational preparation. It was logical that this vacuum would be filled by the emerging high school. But no such transition was to soon take place. Cremin gave an excellent account

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[1] Ibid., p. 45. [2] Ibid., p. 46.

of some of the persons and events that prevented this immediate transition.[1] Over the span of the three decades following 1880, the pressure to fill this middle-level-skill vacuum was built up until finally society demanded that it be filled by the high schools. The traditional thinking in the high schools was broken through only by means of the same remedy that had been used on the colleges--Federal legislation.[2]

Federal involvement in vocational education and guidance. The first Federal program for the purpose of promoting vocational education was the Morrill Act of 1862, as was discussed previously. However, this dealt with post-secondary education. It was the purpose of this author to delineate, in this section, all of the major Federal legislation relating to vocational education which had a direct effect upon the secondary youth of America.

In 1917 the Smith-Hughes Act was passed by Congress. This first major legislation provided, and still provides, seven million dollars annually for secondary agricultural and home economics education. Within three years of enactment

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[1]Lawrence A. Cremin, The Transformation of the School (New York: Alfred A. Knopf, 1961), pp. 14-20.

[2]Venn, op. cit., p. 47.

enrollment in Federally subsidized programs doubled.[1] Borow wrote that while the intent of the act was to provide funds for vocational education, twenty years after its inception funds were available for vocational guidance work.[2]

The Wagner-Peyser Act of 1933 established the United States Employment Service whose primary function was to bring together job seekers and jobs. At the close of World War II Congress returned to the states this authority, however, the Service retained its research advisory, standard setting, and information gathering and disseminating functions.

Two acts, the George-Ellzey Act and the George-Dean Act, added three million and fourteen million dollars to the initial seven million dollars of the Smith-Hughes Act. The George-Ellzey Act (1934) also added support for trades and industry training, whereas the George-Dean Act (1936) included distributive occupations for the first time.[3]

The Works Progress Administration which was established in 1935 and one of its divisions, the National Youth Administration, began providing counseling, placement and follow-up services to youth. This was the first Federal program which provided these services to young people.

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[1] Ibid., p. 60.

[2] Henry Borow (ed.), Man in a World at Work (New York: Houghton-Mifflin Company, 1964), p. 51.

[3] Venn, loc. cit.

In 1938 the Occupational Information and Guidance Service was organized under the Division of Vocational Education of the United States Office of Education. This service framed recommended policies and issued a large number of guidance reports, studies, manuals and bibliographies. The Service was dissolved in 1952.[1]

The Occupational Outlook Service was established in 1940 by Congress within the Bureau of Labor Statistics of the United States Department of Labor. This service compiles numerous reports on occupational characteristics, trends, and opportunities, the most influential of which is the Occupational Outlook Handbook. Also this service has brought to the forefront the trends that indicate an increasing percentage of jobs are requiring an increasing amount of training. This fact has been one of the most influential in convincing people of the need for vocational education.

At the time of World War II Congress invested one hundred million dollars into a short term program which was entitled Vocational Education for National Defense. Although this program was not aimed toward the high schools, it was so successful in providing production workers with pre-employment training that in 1946 Congress supplanted

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[1]Borow, loc. cit.

the George-Dean Act with the twenty-nine million dollar George-Barden Act. This act provided these funds for the same four service fields, agriculture, home economics, trades and industry, and distributive occupations, as the George-Dean Act. Of much significance was that the Congress began to allow greater flexibility of the programs from state to state.[1] In 1956 practical nursing and fishery trades were added to the George-Barden Act.

The period of the early and mid-1950's was generally a time of little progress for vocational education in the Federal government. This was generally attributed to the heavy burden of the Korean Conflict and to the fact that vocational education had fallen into disfavor with some Congressmen. But, with the threat of Soviet scientific and technological superiority, Congress passed the National Defense Education Act of 1958. This act appropriated one billion dollars for twelve separate programs of education. Two of these programs, Title V which authorized funds for guidance, counseling, and testing, and Title VIII authorizing funds for training of technicians, have had a great effect on vocational guidance and education.[2]

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[1]Venn, op. cit., p. 61.

[2]U. S. Office of Education, "The National Defense Education Act of 1958, The New Amendments", School Life XLVI, No. 5 (March-April, 1964), 16-24.

Three monumental acts were passed into law during the first half of the 1960's which have favorably affected vocational education and guidance. These three laws were the Manpower Development and Training Act of 1962, the Vocational Education Act of 1963, and the Elementary and Secondary Education Act of 1965. All three acts provided millions of dollars for use in vocational education, the primary difference being that the Vocational Education Act added to and broadened the previous legislation for vocational education whereas the Manpower Development and Training Act (MDTA) provided funds for vocational training for unemployed as well as underemployed people and the Elementary and Secondary Education Act (ESEA) provided funds to high schools for the purpose of aiding impoverished youth to receive vocational education and counseling.[1] The outstanding characteristic of these three acts was that restrictions on establishment of programs was kept at a minimum, thus allowing considerable latitude in experimentation with new and more meaningful programs to aid youth specifically and the nation as a whole.

Throughout the last half century, and specifically throughout the la st ten years, the Federal Government has taken steps which have furthered the development of vocational education and guidance. It is anticipated by this

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[1]"Planning a New Secondary Vocational Curriculum," The Craft Federal Aid Service, (August 10, 1965).

writer that this trend will continue to be the rule; the Federal Government will continue to lead the way in developing meaningful approaches to education of America's youth.

II. HISTORY OF VOCATIONAL GUIDANCE IN THE UNITED STATES

Guidance as an organized activity was not recognized before the beginning of the twentieth century. Traxler described this movement by saying:

> Among animals and primitive social orders, the guidance of youth is taken care of by the parents. Even in a fairly advanced civilization which maintains a certain homogeneity, the home can continue to be the chief guidance agency. Thus in the largely agrarian society of the United States until approximately 1900 there was no keenly felt need for guidance other than that provided by the family.[1]

The title, "Father of Guidance", was given to Frank Parsons for his work in the establishment of a vocational bureau to train and assist youth from rural areas who came to Boston in the early 1900's to find work. His book, Choosing a Vocation, was published in 1909 and quickly became a model for vocational guidance programs.[2] This text explained methods and ideas for the use of materials that has since become commonplace in vocational guidance.

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[1] A. E. Traxler, Techniques of Guidance (New York: Harper and Brothers, 1946), p. 1.

[2] John Brewer, History of Vocational Guidance (New York: Harper and Brothers, 1942), pp. 1-14.

Evidence of a general interest in guidance was shown when a national convention was held in Boston in 1910. The National Vocational Guidance Association was organized at a subsequent conference in Grand Rapids, Michigan, in 1913.

From 1930 to the present the vocational guidance movement closely paralleled the passing of the vocational acts in Congress. This was due, in large measure, to the fact that as more students became interested in vocational education, they required more assistance in choosing which form of education they were best suited for and which form of education suited them. The first National Occupational Conference was held in 1933. In 1950 a merger of vocational organizations was accomplished with the name of the American Personnel and Guidance Association. Membership has grown steadily since that time with the 1968 membership at 27,488.[1]

The official publication of the Association was begun by the National Vocational Guidance Association, now a division of American Personnel and Guidance Association, in 1924 under the title of Occupations. The publication is now known as the Personnel and Guidance Journal and has a large circulation among those interested in guidance.

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[1] "Membership by States-1967 and 1968," Personnel and Guidance Journal, XLV (September, 1968), 100.

III. STATUS OF SECONDARY VOCATIONAL EDUCATION AND GUIDANCE IN THE UNITED STATES

The passage of the Vocational Education Act of 1963 and the Elementary and Secondary Education Act of 1965 brought to the forefront issues, the results of which will greatly affect vocational education and guidance programs of the future.

The value of vocational education and guidance in high schools. In recent years several authors have been quite outspoken on this matter, some have been totally against, and others totally for the idea of maintaining and improving vocational education within the secondary schools.

Ginsberg, in his rejection of having vocational education as a part of the secondary school, stated:

> I have a personal predilection. . . for a curriculum based on the following essential ingredients: teaching all youngsters how to write effectively, introducing them to quantitative relationships, and providing them with some sense of the physical and social world.
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> What I have said above has direct implication for vocational education. I believe that it will be increasingly difficult, if not totally impossible, in a rapidly changing and ever more complex technology, to provide the replicas of industry within the classroom.[1]

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[1]Paul Rosenbloom (ed.), Modern Viewpoints in the Curriculum, citing M. Ginsberg, (New York: McGraw Hill, 1964), p. 10.

Ginsberg continued by stating that rather than introduce vocational education, educators should translate the formal curriculum so that it would be more interesting and meaningful to young people.

Miller stated that if vocational education continues as it has it will be doomed. Two reasons were given for this position: (1) vocational education students too often are the dropouts and castoffs of the academic curriculum and (2) vocational education courses do not teach skills that modern industry wants.[1] Butcher gave evidence to this first statement when he said that business education teachers "watered down" their programs because they did receive the castoffs of the academic curriculum.[2]

Another dissenting vote for vocational education was cast by Tyler. That author had serious doubts as to whether or not vocational education could effectively keep up with the rapidly changing occupational structure of America.[3]

Several other authors held an opposite view of that

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[1]James N. Miller, "The Coming Revolution Against Boredom," PTA Journal, LX (April, 1966), 18-21.

[2]Stephen Butcher, "How Can We Make Business Education Respectable?", Journal of Business Education, XL (April, 1965), 1.

[3]Paul Rosenbloom, (ed.), Modern Viewpoints in the Curriculum, citing Ralph W. Tyler, (New York: McGraw Hill, 1964), p. 14.

held by Tyler, Ginsberg, and Butcher. Among those was James Bryant Conant who felt that vocational education should definitely be offered within a comprehensive secondary school. In expressing his belief Conant stated:

> My inclination is strongly in favor of including vocational work within a comprehensive high school instead of providing it in a separate high school. My reasons are largely social rather than educational. I believe it is important for the future of American democracy to have as close a relationship as possible in high school between the future manager of industry, the future labor leader, the future salesman, and the future engineer. As I have often expressed in my writings . . . I am convinced that one of the fundamental doctrines of American society is equality of status in all forms of honest labor as well as equality of opportunity.[1]

Van Raalte echoed Conant's feelings when he stated that because our society provides fewer and fewer employment opportunities for unskilled laborers, the comprehensive high school must assume the responsibility of providing its graduates with the kinds of skill training that would make them employable upon graduation. Van Raalte went on to caution that if the vocational program were not job oriented they would lack effectiveness.[2]

Chase discussed the need for more and better high school vocational education when he pointed out that in

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[1]James Bryant Conant, The Comprehensive High School (New York: McGraw-Hill, 1967), p. 62.

[2]Robert C. Van Raalte, "A Challenge to School Boards," The American School Board Journal, CLIII (October, 1966), 23.

1962, while general unemployment remained at a fixed level, the number of young people out of work leaped upward by 100,000. The same author went on to state that the early figures for 1963 indicated another 100,000 increase in youth unemployment.[1]

Williams felt that it was true that in the past vocational education was ineffective, but this was a result of the low status that vocational education had in the eyes of Americans. If vocational education could maintain flexibility within itself it would have much to contribute in the future. If, however, it could not achieve flexibility it would maintain its low status.[2]

Harris felt that vocational education has gained an increasing amount of acceptance within the past few years and he, like Conant, felt that it must not be separated from the regular curriculum.

> Vocational education in America is a part of the mainstream of education. Separating youth into two groups to attend two kinds of schools (one of which will be "first class" and the other, inescapably "second class") is psychologically unsound, economically unjustified, and democratically indefensible.[3]

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[1]Edward T. Chase, "Learning to be Unemployable," Harper's Magazine, CCXXVI (April, 1963), 33.

[2]Williams, op. cit., 358.

[3]Norman C. Harris, "Redoubled Efforts and Dimly Seen Goals," Phi Delta Kappan, XLVI (April, 1965), 365.

One author, Young, felt that the current structure of American society is such that vocational education has hardly been given a chance to succeed. That author cited the fact that Americans have an almost unthinking belief in the "English gentleman" philosophy of life which immediately tends to discourage vocational education. Also, because colleges are academically oriented they have tended to judge high schools by the degree of academic success of the high school's graduates in college. The final point made by Young was that high school administrators have not truly understood vocational education and because of this, have inhibited growth of the program.[1]

Wrenn, in The Counselor in a Changing World, pointed up a fallacy in the debate concerning vocational education against academic education. In a society where cultural changes are extremely rapid, aims must be paired or linked. Wrenn stated:

> "Vocational" without "intellectual" is simply not realistic in view of the brains emphasis in vocations. It must be intellectual-vocational or vocational-intellectual not one versus the other. Schools cannot be intellectual only or vocational only if they would fit into our practical and technological but also ideational and scientific culture.[2]

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[1]Robert W. Young, "The Academic 'Mohammed' and the Vocational 'Mountain'," School Shop, XXIX (October, 1964), 27.

[2]C. Gilbert Wrenn, The Counselor in a Changing World, (Washington: American Personnel and Guidance Association, 1962), p. 83.

This author concluded by re-emphasizing his point:

> The vocational emphasis, the socialization emphasis, the national emphasis are as essential as ever. But they must be paired in this way: vocational-intellectual, socialization-individualization, American culture-world culture. If we stick to the first concept of each pair, the world will leave us--individually and as a nation--far behind. We shall become, as John Gardner writes, a ". . .museum nation, and tourists from more vigorous land will come from afar to marvel at our quaint ways."[1]

IV. RELEVANCE OF HIGH SCHOOL VOCATIONAL EDUCATION TO IOWA

At the time of this study, Iowa's economic and social patterns were in the process of rapid change. During the period from 1934 to 1965 the number of Iowa farms decreased from 223,000 to 175,000 and the trend is to continue in that direction. At the same time that these reductions were recorded, agricultural production marked a two per cent per year increase and manufacturing had made a three per cent per year gain.[2]

Hanson, citing studies completed by Maki for the Governor's Planning and Programing Office, stated that by 1980 total employment in Iowa is expected to increase by approximately twenty-four per cent. However, significant declines in employment would be noted in the areas of

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[1]Ibid.

[2]Ellis G. Hanson, A Design for Educational Organization in Iowa (Des Moines: State of Iowa, Department of Public Instruction, 568A-671AF, 1968), p. 14.

livestock production, crop production, meat products, and transportation, communication, and utilities. These declines would be more than offset by employment gains in other areas, including finance-insurance real estate, other services, and machinery production. During the time from 1960 to 1980 the gross state product would be expected to double in amount.[1]

The population distribution between rural and urban areas has also undergone a vast change. In 1900 seventy-five per cent of Iowa's population resided in rural areas whereas twenty-five per cent resided in urban areas. Since that time the rural population has steadily declined with an equally steady increase in urban population. In 1953 there was a fifty-fifty split between rural-urban populations, and since that time the urban population has passed the rural population in per cent of Iowa's total population.

Hanson, in predicting even greater rural-urban population divergence throughout the remainder of this century, cited four trends which are evident in Iowa:

1. Contract farming appears to be on the increase throughout the nation and, although not currently extensively used in Iowa, is expected to increase in Iowa.
2. The entry into farming of sizable industrial concerns will tend to consolidate even more farm units.

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[1] Ibid.

3. Increased sophistication and application of technology and automation will reduce further the labor needs in direct farming.
4. The increased application of technology will expand the need for an increasing array of technically trained people in ag-related occupations. These will be highly trained people with agricultural backgrounds but associated in business and industrial capacities in support of actual farm operations.[1]

With these projections and trends in mind, it would be evident that Iowa would have an increasing need for a proper type of vocational education. Several people have been critical of Iowa's program of vocational education, because of the emphasis on agricultural education. These critics have cited Iowa's decreasing farm population and the fact that only one in ten young people who desire a job on the farm can find openings.[2] These people felt that agricultural education should be de-emphasized and increased emphasis should be placed on other forms of vocational education.

In reply to critics, Dalbey stated that thirty-eight per cent of the working force is employed in agriculturally related industry; this is the same proportion as was recorded thirty years ago. Stated another way, the employment picture has shifted from production farming to the related agricultural industries.[3] This view tended to be substantiated by studies

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[1] Ibid., p. 23. [2] Edward Chase, op. cit., 34-35.

[3] C. W. Dalbey, "Farm Related Industries Spur Vocational Ag Programs," Midland Schools, LXXXII (May-June, 1968) 26.

completed in conjunction with the Great Plains School District Organization Study which was completed in 1968.[1]

Some authorities have concurred with Dalbey but felt that the vocational agriculture curriculum needed to undergo some modification to meet the changing demands of Iowa's economic society. Kolmer proposed the following threefold approach to agricultural education:

1. Teach more about the enterprise system explaining corporations, partnerships, cooperatives and proprietorships.
2. Utilize a work-study experience in many aspects of business community life and not just the farming aspect of business.
3. Teach various systems and methods of marketing and merchandizing, with emphasis on the principles of these processes in relationship to the U. S. economy and society.[2]

One final and important point about vocational education as it relates to Iowa is to be made. Hanson, in citing an Ohio study of 1963, stated that vocational education in the smaller high schools was offered on a limited basis and that these programs were expensive to maintain. The same study indicated that only in those schools with enrollments of one thousand or more were the vocational courses

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[1]Hanson, loc. cit.

[2]Lee Kolmer, "Urges Change in Vocational Agriculture Program," The Des Moines Sunday Register, Section F, October 20, 1968, p. 1.

of a really meaningful nature.[1] This statement tended to infer that the vocational programs offered in Iowa's smaller high schools were not of a meaningful nature and that some type of re-evaluation was necessary.

V. CONCLUDING STATEMENTS

It was with the above comments in mind that this study was initiated. With Iowa's social, economic, and educational institutions in a period of great change, it was felt that new insights might be gained by surveying those people who were directly affected by Iowa's vocational education system, the students who received that education. It was hoped that the 1967 high school vocational program graduates who were selected for the study could supply valuable information regarding the value of the vocational program, the strong and weak points of the program, their post-secondary activities, the people who played important roles in their high school decisions for the future, and the effect that the high school vocational program had on their respective lives. In addition, it was hoped that the information supplied would help guidance workers to better assist future high school vocational students in making wise occupational and educational plans.

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[1] Henson, op. cit., p. 6.

CHAPTER III

PRESENTATION OF THE DATA

I. PER CENT OF RETURN

Efforts were made to contact 300 of the 649 Area V and Area XI high school vocational program graduates who later continued their education. Names and addresses were obtained from the Iowa State Department of Public Instruction's 1967 Vocational Student Follow-Up. If subjects failed to respond to the two separate mailings of the questionnaire, no further efforts were made to contact these people. In cases where fragmentary or incomplete information was obtained, the individual was listed as a non-respondent.

Table I shows that reliable information was obtained from 81.0 per cent of those surveyed. It was felt that

TABLE I

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: PER CENT OF RETURN OF THE STUDY

Sex	Sample	Usable Return	Per Cent of Return
Female	159	117	73.5
Male	141	126	89.4
Totals	300	243	81.0

this represented a reasonable portion of the population of the study.

II. HIGH SCHOOL VOCATIONAL PROGRAMS

The study attempted to determine which types of vocational education rural central Iowa youth were enrolled in at the high school level. Table II indicates the number and per cent of female and male graduates who completed each type of vocational program in 1967. It should be noted that only two persons indicated they completed a technical program. Because of this they were grouped with the trade and industry group. It was felt that these groups were allied closely enough to do so without affecting the results of the study.

As was expected, there was not an even distribution among the six categories used. The largest segment of the population of the study was found in the vocational agriculture program which contained 39.1 per cent of the subjects. Home economics and office education contained about the same percentage of enrollees with 20.6 per cent and 19.3 per cent respectively. Distributive education claimed 11.5 per cent of the respondents.

The most notable finding in this area was that three programs combined--health, trade and industry, and technical--

TABLE II

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: TYPE OF PROGRAM ENROLLED IN AT THE HIGH SCHOOL LEVEL

Program	Female	Male	Total	Per cent of grand total
Agriculture	0	95	95	39.1
Home economics	50	0	50	20.6
Office education	45	2	47	19.3
Distributive education	10	18	28	11.5
Health	12	0	12	4.9
Trade & industry and Technical	0	11	11	4.5
Totals	117	126	243	99.9

had one-fourth as many enrollees as did the largest area, agriculture.

III. POST-SECONDARY EDUCATION

One of the more important segments of the study related to the kinds of post-secondary educational programs undertaken and the types of educational institutions at which these programs were begun.

Table III shows the per cent of graduates who continued their education in an area related to their high school vocational area.

It was found that 60 per cent or 57 of the 95 boys who took vocational agriculture in high school, continued

in some area related to agriculture. This would tend to indicate, contrary to what many believe, that boys do consider the high school agriculture program as an important intermediate step towards advanced knowledge in that field, rather than merely being a terminal program.

TABLE III

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: PER CENT OF GRADUATES CONTINUING EDUCATION IN AN AREA RELATED TO HIGH SCHOOL VOCATIONAL AREA

Area	Respondents	Number continuing in related area	Per cent
Agriculture	95	57	60
Home economics	50	12	24
Office education	47	19	43
Distributive education	28	6	21
Health	12	6	50
Trade & industry and Technical	11	5	45
Totals	243	105	42.2 Aver.

Even though the areas of health, trade and industry and technical was represented by only 23 persons, nearly half of those continued in these areas. The office education area had 43 per cent of its graduates continuing for further education in that field.

The two areas where graduates demonstrated least interest in continuing were home economics and distributive

education. Less than one-fourth of those taking high school home economics continued and 21 per cent of those taking distributive education continued.

Considering the population of the study in its entirety disclosed one interesting and important fact. Of the 243 respondents 105, or 42.2 per cent, continued their education in an area related to their high school work.

Table IV shows what type of educational programs were undertaken at the post-secondary level. It should be noted that 32 people failed to respond in a manner that could be tabulated.

TABLE IV

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: AREA OF CONCENTRATION OF THE POST-SECONDARY EDUCATIONAL PROGRAM

Area	Female	Male	Total	Per cent of grand total
Agriculture	0	60	60	28.6
Liberal arts	18	26	44	20.4
Office education	21	6	27	12.8
Health	20	0	20	9.5
Trade & industrial and Technical	0	15	15	7.1
Home economics	14	0	14	6.2
Teacher education	13	0	13	6.2
Cosmetology	12	0	12	5.7
Distributive education	0	6	6	2.8
Totals	98	113	211	99.3

Almost three-fourths of those responding to this section of the questionnaire indicated one of the four areas: agriculture, liberal arts, office education, or health. Agriculture was the area in which the highest interest was shown, with 28.6 per cent of the total responding to this item. When considering only boys' responses, 53 per cent chose agriculture. Liberal arts programs were indicated by 20.4 per cent of those responding, and office education and health followed with 12.8 and 9.5 per cents respectively.

A point should be noted here regarding the health area. Only six of those who were enrolled in a high school health program continued, but an additional 14 girls joined them at the post-secondary level.

The remaining 28 per cent of those responding to what type of post-secondary educational program they were enrolled in indicated trade, industry and technical, home economics, teacher education, cosmetology, and distributive education, in that order.

Table V indicates the type of educational institution that post-secondary vocational students choose.

Colleges absorbed the majority of those continuing their education. This was demonstrated by the fact that 55.0 per cent continued to colleges. No other type of

institution came close to this figure. Business schools, however, were selected by 11.4 per cent of those responding.

TABLE V

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: TYPE OF EDUCATIONAL INSTITUTION STUDENT ENROLLED IN UPON GRADUATION

Type of educational institution	Female	Male	Total	Per cent of grand total
College	46	70	116	55.0
Business school	19	5	24	11.4
Cosmetology	12	0	12	5.7
Jr. college	3	4	7	3.3
Area vocation school	4	6	10	4.7
Nursing	7	0	7	3.3
Private trade	0	6	6	2.8
Medical trades	6	0	6	2.8
Computer	0	2	2	.9
Armed services	0	2	2	.9
Unknown	1	18	19	9.0
Totals	98	113	211	99.8

These two types of institutions were followed in order by cosmetology schools, junior colleges, area vocational schools, schools of nursing, private trade, medical trade, and computer schools. It could not be determined what type of school was chosen by 9.0 per cent of those responding.

Of note is that 4.7 per cent of those responding chose area vocational schools even though these schools have been in operation for only three years.

IV. CHANGING VOCATIONAL AREAS

The study attempted to gain insight into why some students changed from one vocation program in high school to another in a post-secondary institution. The importance of this topic can be seen in Table III on page 38, which indicates that 42.2 per cent of those continuing their education continued in the same area as their high school vocational area. This suggested that somewhat less than sixty per cent did not continue in the same area. It would be helpful, therefore, to discover why some students changed areas.

Table VI shows reasons given by students for changing vocational areas. A total of 102 reasons were given.

A total of 36 students indicated that after they had completed the high school vocational program they realized that they were not interested any longer. Another 23 respondents stated that the area they were really interested in was not offered at the high school they attended, but they wanted some type of vocational program.

A somewhat unusual response was received from 9 students, who stated that they changed because the college or junior college they attended did not offer the same programs as the secondary school. Along the same line, 4 students indicated they changed because they wanted to attend college.

Other responses covered many areas. A total of 5 students took a high school vocational course to acquire a salable skill, 4 indicated that they wanted to broaden their interests, 4 took the course because it was required, 2 students indicated their parents wanted them to change, and one student stated that he was never interested in the high school course.

TABLE VI

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: REASONS GIVEN FOR CHANGING VOCATIONAL AREA AFTER GRADUATION

Reason	Number of responses
After completing the vocational program the student realized he was not interested	36
Real interest area was not offered in high school	23
That vocational course was not offered at the college or jr. college	9
Preferred another area	8
Took course to acquire salable skill	5
Needed to widen interests	4
Wanted to attend college	4
College experience led to change	4
Course was required	3
Wanted to fulfill military obligation	3
Parents wanted student to change	2
Was never really interested in vocational area	1
Total	102

An attempt was made to gain insight into who played a major role in the student's decision to change vocational areas. Table VII on the following page shows these findings.

The researcher, in posing this question, assumed that the final decision would be that of the respondent. Some respondents, however, indicated "self" on the questionnaire. Because of this, two separate percentages were figured, one including, and one excluding, the self responses. For the purpose of this discussion this writer has chosen to use the latter percentages.

Parents, more than any other individuals, appeared to influence the students who considered a change in vocational education. A total of 38 per cent of the responses stated that parents influenced the students. The guidance counselor received 26 per cent of the responses to this item and the vocational instructor received 13 per cent. Friends have some influence on the students as indicated by 11 per cent of the responses.

TABLE VII

SELECTED AREA V AND AREA XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: PEOPLE WHO INFLUENCED RESPONDENTS' DECISIONS TO CHANGE FROM VOCATIONAL AREA

Persons influencing respondents	Female	Male	Total	Per cent of total responses	Per cent of total less the "Self" responses
Parents	17	18	35	23.8	38
Guidance counselor	14	10	24	16.2	26
Vocational instructor	6	6	12	8.1	13
Other:					
Self	27	29	56	37.8	
Friends	4	6	10	6.8	11
Siblings	4	0	4	2.7	4
Church	3	0	3	2.0	3
Coach	1	1	2	1.3	2
Court reporter	1	0	1	.7	1
Veterinarian	0	1	1	.7	1
Totals exclusive of "Self"	50	42	92		99
Totals	77	71	148	100.1	

Table VIII indicates students' judgments, in retrospect, of the wisdom of their decision to change vocational areas between the secondary and post-secondary levels.

TABLE VIII

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: PERSONAL JUDGMENT OF DECISION TO CHANGE VOCATIONAL AREAS

Judgment	Female	Male	Total	Per Cent
Wise decision	60	49	109	91.6
Unwise decision	2	8	10	8.4
Totals	62	57	119	100.0

Of those who changed, 91.6 per cent indicated that the decision to change was wise. By sex, 97 per cent of the girls and 84 per cent of the boys considered the decision wise.

V. PERCEPTIONS OF HIGH SCHOOL VOCATIONAL PROGRAMS

The study sought information which would provide insights as to which aspects of the high school vocational programs were perceived favorably and which were perceived unfavorably. This could then supply new insights into the strengths and weaknesses of such programs.

Table IX (page 48) and Table X indicate to what extent six factors were liked in the high school vocational program. Table IX indicates this by vocational area and Table X by sex of the respondents.

TABLE X

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: FACTORS OF THE HIGH SCHOOL VOCATIONAL PROGRAM WHICH WERE LIKED, BY SEX

Factor	Female	Male	Total
Basic subject matter	98	106	204
Instructor	68	85	153
Lab or shop phase	47	90	137
Equipment	50	50	100
Grading system	38	43	81
Other	8	9	17
Totals	309	383	692

In considering the tabulation by vocational area it was found that the basic subject matter was liked by 204 respondents. All vocational areas but the trade, industry, and technical areas listed this as the best liked factor and this area ranked subject matter second. The instructor was perceived as liked by 153 respondents although the laboratory or shop phase of the vocational program was almost equally well like. Of the 243 respondents 100 indicated they liked the fact that there was satisfactory equipment available.

TABLE IX

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: FACTORS OF THE HIGH SCHOOL VOCATIONAL PROGRAM WHICH WERE LIKED, BY VOCATIONAL AREA

Factor	Agri-culture	Home economics	Office education	Distri-butive education	Trade & industry and Technical	Health	Total
Basic subject matter	86	41	40	21	6	10	204
Instructor	69	26	26	16	8	8	153
Lab or shop phase	70	28	9	20	6	4	137
Equipment	38	25	17	10	4	6	100
Grading system	27	18	10	16	6	4	81
Other	1	2	7	7	0	0	17
Totals	291	140	109	90	30	32	692

In viewing the same factors by sex it was found that the subject matter was best liked by both sexes. The instructor, however, was ranked second by girls but third by boys. The laboratory or shop phase of the vocational program was ranked second by boys but only ranked fourth by girls. The third ranking factor for the girls was the equipment.

Table XI (page 50) and Table XII indicate to what extent the same six factors were disliked. Table XI is by high school vocational area and Table XII is by sex.

TABLE XII

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: FACTORS OF THE HIGH SCHOOL VOCATIONAL PROGRAM WHICH WERE DISLIKED, BY SEX

Factor	Female	Male	Total
Unsatisfactory equipment	26	36	62
Instructor	13	23	36
Grading system	19	12	31
Basic subject matter	12	14	26
Lab or shop phase	14	6	20
Other	1	16	17
Totals	85	107	192

In considering the ranking of these six areas it was found that 62 of the 192 responses indicated the least liked aspect of the vocational program was the unsatisfactory

TABLE XI

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: FACTORS OF THE HIGH SCHOOL VOCATIONAL PROGRAM WHICH WERE DISLIKED, BY VOCATIONAL AREA

Factor	Agri-culture	Home economics	Office education	Distri-butive education	Trade & industry and Technical	Health	Total
Unsatisfactory equipment	26	1	19	10	4	2	62
Instructor	17	11	2	6	0	0	36
Grading system	6	10	3	4	2	6	31
Basic subject matter	4	8	0	7	5	2	26
Lab or shop phase	4	4	3	2	2	5	20
Other	14	0	1	0	2	0	17
Totals	71	34	28	29	15	15	192

equipment. Agricultural, office education, and distributive education students ranked this as least liked whereas only one home economics atudent disliked this factor. The instructor was found to rank first among home economics students and second among agriculture students as the most disliked factor of the program.

Ranking by sex indicated that unsatisfactory equipment was the most disliked aspect of vocational programs. Both boys and girls ranked this as least liked. Girls rated grading system, laboratory or shop phase, instructor, basic subject matter, and other in that order above equipment. Boys listed instructor, other, basic subject matter, and laboratory or shop phase in that order above equipment.

More significant information was gained by comparing the number of unfavorable responses to the total number of responses for the six factors used. Table XIII shows these findings.

Of a total of 162 responses relating to vocational equipment, 62, or 38.2 per cent, indicated that the equipment was of an unsatisfactory nature. Of those responding to the grading system factor, over one-fourth expressed a dislike for it. One in every five students who responded to liking or disliking the vocational instructor expressed a dislike for him. In addition 12.7 per cent disliked the

laboratory or shop phase of the vocational program and 11. per cent disliked the subject matter. The same amount of favorable as unfavorable additional factors were cited.

TABLE XIII

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: PER CENT OF STUDENTS RESPONDING UNFAVORABLY TO FACTORS OF THE HIGH SCHOOL VOCATIONAL PROGRAM

Factor	Negative Responses	Total Responses	Per Cent of Total
Equipment	62	162	38.2
Grading system	31	112	25.8
Instructor	36	189	19.0
Lab or shop phase	20	157	12.7
Basic subject matter	26	230	11.3
Other	17	34	50.0
Totals	192	884	21.7 Aver

VI. VALUE OF VOCATIONAL PROGRAMS

One of the concerns of the survey was to discover to what extent the high school vocational program student valued his vocational training. An excellent response was gained as all students made a value judgment of their program.

Table XIV shows the distribution of these judgments among the six vocational areas used in this study.

TABLE XIV

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: VALUE OF THE VOCATIONAL PROGRAM AS PERCEIVED BY GRADUATES

Program	Very valuable	Valuable	Little value	No value	Total
Agriculture	34	54	7	0	95
Home economics	16	26	6	2	50
Office education	24	19	4	0	47
Distributive education	6	18	4	0	28
Health	4	8	0	0	12
Trade & industry and Technical	4	3	2	2	11
Totals	88	128	23	4	243

Of the 95 boys who were enrolled in an agricultural program 34 felt the program was very valuable, 54 felt it valuable and 7 felt it was of little value. The home economics program was considered very valuable by 16, valuable by 26, and 8 girls indicated they saw little or no value in the program. Equally impressive figures were given for the remaining four areas.

Table XV indicates the number and per cent of total value judgments which fell in each of the four categories.

Of the 243 students surveyed 88, or 36.2 per cent, felt that their high school vocational program was very valuable. An additional 52.7 per cent felt that the program was valuable, and the remaining 11.1 per cent indicated that they received little or no value from the program. It is quite significant that 89.9 per cent felt that vocational programs were valuable to them.

TABLE XV

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: STUDENTS RATINGS OF HIGH SCHOOL VOCATIONAL PROGRAM

Value	Number of responses	Per cent of Responses
Very valuable	88	36.2
Valuable	128	52.7
Little Value	23	9.5
No Value	4	1.6
Totals	243	100.0

A total of 186 comments were given as a basis for the students value judgments. These comments are listed in Table XVI.

Of the total of 186 comments that were given, 170 were classified as favorable whereas the remaining 16 were

TABLE XVI

SELECTED AREA V AND AREA XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: COMMENTS USED AS A BASIS FOR VALUE JUDGMENTS OF HIGH SCHOOL VOCATIONAL COURSES

Comment	Number of responses
Favorable:	
Learned a lot	36
Helped for college	23
Provided a good background	25
May need it in later life	24
Helped to clarify goals	12
Very practical	13
Will help in securing a job	8
Work experience gained	8
Helpful for marriage	7
Success at college	4
Provided social opportunities	4
Well-educated instructors	3
Broadened knowledge of employment possibilities	2
Enjoyed vocational course	1
Total favorable	170
Unfavorable:	
Course length too short	6
Poor instruction	5
Outdated material	2
Training was not relevant	2
Did not learn anything	1
Total unfavorable	16
Grand total	186

classified as unfavorable. The most frequent favorable comment was that the student had "learned a lot" in the vocational program. Thirty-six students made that comment. An additional 25 students felt that the high school program provided a good background, 24 felt the vocational education would be helpful in later life, and 23 felt vocational education at the high school level helped them to succeed in college. Practicality was listed by 13 students as being a valuable aspect of the vocational program, and helpfulness in clarifying goals was cited by 12 respondents. The remaining favorable comments were: helped in securing a job, work experience gained, helpful for marriage, success in college, provided social opportunities, well-educated instructor, broadened employment knowledge, and enjoyed the vocational course.

Even though 16 unfavorable comments were listed as basis for value judgments of the high school vocational programs, all but one were of a constructive nature. Six persons felt that the vocational program was of little or no value because the courses were too short. An additional five listed poor instructor, two listed that material was outdated and training was not relevant to industry. One person stated that he, "did not learn anything."

VII. COMMENTS ON VOCATIONAL EDUCATION

At the conclusion of the questionnaire respondents were encouraged to make any additional comments they wished regarding the high school vocational education program. Table XVII contains these comments.

Comments were divided into two major areas, favorable and unfavorable. A total of 64 comments were made with 26 being favorable and 38 being unfavorable to vocational programs.

Of those making favorable comments 13 stated that the vocational program provided a good experience. Practicality of the program was indicated by 6 of the respondents and 3 felt that the vocational programs helped to develop leadership. Four remaining people stated they gained new insights, developed individualism or saw a need for more vocational education.

All of the unfavorable comments made by program graduates were of a constructive nature. No graduate indicated that the vocational program should be eliminated or that it did not belong in the high school curriculum. A total of 20 people indicated that the program was not adequate and did need improvement. Five persons were disappointed because the high school vocational program did not provide skills necessary for entry into occupations. Improved instruction and better communications were requested

TABLE XVII

SELECTED AREA V AND XI 1967 HIGH SCHOOL VOCATIONAL PROGRAM GRADUATES: COMMENTS ON VOCATIONAL EDUCATION

Comments	Number of responses
Favorable:	
Good experience	13
Practical	6
Helped develop leadership	3
Gained new insights	2
Developed individualism	1
Saw need for more vocational education	1
Total favorable	26
Unfavorable:	
Program not adequate	16
Did not provide entry skills	5
System needs improvement	4
Instruction needs improvement	4
Better communication needed	4
Better counseling needed	3
Small schools inadequate	1
Higher wages for participants needed	1
Total unfavorable	38
Grand total	64

by 4 respondents each. Better communications were deemed necessary between instructor and employer and between the local and state organizations. Three program graduates indicated that the vocational counseling they received should be improved. One respondent felt that the small schools could not provide adequate vocational programs and one felt that the students needed high wages for the on-the-job training programs offered in some vocational programs.

CHAPTER IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

I. SUMMARY

The information sought by this study was fivefold:

1. To determine to what extent the student valued his high school vocational program.
2. To determine if the high school offered the vocational program the student enrolled in at the post-secondary level.
3. To determine why students continued or discontinued training in the vocational area they studied in high school.
4. To determine who influenced the student's decision to go into the vocational area the student chose.
5. To determine what were some of the factors students liked and disliked about their high school vocational programs.

The data were obtained by mailing questionnaires to 300 of the 649 1967 high school graduates who had completed an approved vocational program in an Area V or XI high school and then continued to post-secondary education. If a reply to the first mailing was not obtained, a second questionnaire was mailed. No further efforts were made

to contact those who did not respond to the second mailing. If the information obtained was not complete enough to be considered reliable, the graduate was classified as a non-respondent.

Information on the type of high school vocational program completed indicated that vocational agriculture was undertaken by 39.1 per cent of the respondents. In contrast only 9.4 per cent were enrolled in the combined areas of health, trade and industrial, and technical education. It should be pointed out that this survey excluded the five largest population centers in the Central Iowa area and, therefore, tends to represent rural or small town youth.

On the average, 42.2 per cent of those continuing their education after high school continued in an area related to their high school vocational area. Agriculture students demonstrated the greatest interest in continuing in the same area when 60 per cent indicated they chose agriculture. Nearly one-half of those in the health, trade and industrial, and technical programs continued in their respective areas. Showing the poorest degree of continuance were home economics, with 24 per cent continuing, and distributive education with 21 per cent continuing.

Information on the type of educational program students enrolled in at the post-secondary level indicated

that almost three-fourths of the students enrolled in agriculture, liberal arts, office education, or health areas. Findings indicated that 55.0 per cent of all respondents continued their education at the college level and 11.4 per cent continued at business schools.

Several reasons were found for students changing from one vocational area in the secondary school to another at the post-secondary level. After 36 students completed the high school program they realized that they did not like it well enough to continue. An additional 23 stated that the program they were really interested in was not offered in high school. Nine students indicated they did not continue because the college or junior college they attended did not offer that area. Of those who changed areas, 91.6 felt that the decision to change was a wise decision. Thirty-eight per cent of the students stated that their parents influenced their decision to change and another 26 per cent stated that the guidance counselor influenced them to change.

It was found that some aspects of the vocational programs were perceived less favorably than were others. Of the total responses made concerning equipment 38.2 per cent indicated disfavor, and 25.8 per cent of the responses regarding grading were unfavorable. Nineteen per cent disapproved of the vocational instructor.

In making an evaluation of their total high school vocational program 36.2 per cent felt the program was very valuable. An additional 52.7 per cent felt the program was valuable.

Respondents were encouraged to make comments concerning their high school vocational curriculum. Thirty-eight unfavorable comments were made compared with 26 favorable comments. All, however, indicated that vocational education was good but some programs needed improvements.

II. CONCLUSIONS

The analysis of the data in terms of the objectives of the study led to the following conclusions:

1. An overwhelming majority, 88.9 per cent felt their high school vocational programs were valuable.
2. The majority of the respondents did not continue their education in the same vocational area in which they were enrolled at the high school level.
3. Of those changing vocational areas between high school and post-secondary, 35.3 per cent changed because they discovered they were not interested, 33.9 per cent were interested in another area, and 8.8 per cent changed because the college in which they were enrolled did not have a related course.

4. Parents influenced the decision of 38 per cent of those who changed vocational areas and counselors influenced 26 per cent of those who changed.
5. The best liked features of the vocational programs were the basic subject matter and the laboratory or shop work, whereas the less liked feature was the condition of the equipment.
6. Iowa's rural schools' vocational programs are still dominated by agriculture and home economics programs.

III. RECOMMENDATIONS

With the conclusions of the study in mind it is recommended that:

1. Vocational education should be continued and expanded in Iowa's rural areas.
2. A more adequate job of vocational counseling needs to be done in order to make students more cognizant of the availability of secondary and post-secondary vocational education.
3. Better lines of communication should be established among parents, instructors, counselors, and students, in order that the student gain maximum benefit from his vocational program.

4. A more detailed study should be conducted to explore the adequacy of equipment used in the various vocational programs.

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APPENDIXES

APPENDIX A

QUESTIONNAIRE

Directions: Please check or complete all of the items which are appropriate to you.

Name_____ Home Address_____

High School Attended_____

1. Type of vocational program enrolled in while in high school.

___Agriculture ___Distributive Education ___Health
___Home Economics ___Office Education ___Technical
___Trade and Industrial

2. Type of program enrolled in after attending high school.

___Agriculture ___Distributive Education ___Health
___Home Economics ___Office Education ___Technical
___Trade and Industrial ___Other (please list)_____

3. If the response to items 1 and 2 are not the same, which of the following caused you to change?

___The vocational program I was interested in was not offered at my high school.

___After taking courses in high school I decided I did not like the vocational area in which I was enrolled.

___Other (please explain)_____

4. a. If the responses to items 1 and 2 are not the same, which of the following people played a major part in your decision?

___Your parents ___Your vocational teacher
___Your guidance counselor ___Other (if so, who)_____

b. Do you feel that this decision was a wise one?

___Yes ___No

5. Which of the following did you like about your high school vocational program? (check all that are appropriate)

___Basic subject matter ___Grading system ___Instructor
___Laboratory or shop phase ___Satisfactory equipment
___Other (please list)_____

6. Which of the following did you dislike about your high school vocational program? (check all that are appropriate)

___Basic subject matter ___Grading system ___Instructor
___Laboratory or shop phase ___Satisfactory equipment
___Other (please list)_____

7. a. What value do you place on your high school vocational education?

___Very valuable ___Valuable ___Little value
___No value

b. On what do you base this value judgment? _____
_____

8. Make additional comments below please.

APPENDIX B

SAMPLE LETTER TO GRADUATE

Dear

I am making a survey of 1967 high school graduates who have taken vocational programs in high school. Upon graduation these people have enrolled in some type of post-secondary education. I am trying to find out how these people feel about the vocational education which they had in high school.

You are very important because you have been identified as such a person and you probably have feelings about the worth of such a program. If you will express these feelings on the enclosed questionnaire you will supply valuable information to us educators. This information will be used to determine if our present vocational programs are doing the job for which they were intended.

Space has been provided at the bottom of the questionnaire so that you can make any further comments which you feel are important. If you prefer not to include your name this will be satisfactory.

A self-addressed stamped envelope is included for your convenience. Thank you very much for your time and consideration.

Sincerely,

Ben Smith, Guidance Counselor